IN THE SPECIFICATION:

Please amend the paragraph starting at page 1, line 20 and ending at line 24 as follows.

Also, measures to prevent dust explosions [[by]] due to the ignition of fine powders are necessary for the pulverizing treatment of process cartridges containing toners, etc., and there is a techniques disclosed in the Japanese Patent Laid-Open No. 11-156224 as one of such measures.

Please amend the paragraph starting at page 1, line 25 and ending at page 2, line 5 as follows.

Furthermore, the Japanese Patent Laid-Open No. 05-301222, the Japanese Patent Laid-Open No. 2000-159900 and the Japanese Patent Laid-Open No. 2001-030248 disclose techniques related to the recycling of thermoplastic resin materials used in the parts of office equipment, such as coping machines, printers, ~~facsimiles~~ facsimile machines and televisions, and electrical machinery and apparatus.

Please amend the paragraph starting at page 3, line 8 and ending at line 12 as follows.

For this reason, in the succeeding ~~processes~~ processes, the number of disposal steps increases and it becomes necessary to use a high-accuracy separation apparatus of resin materials, with the result that the cost of recycled materials increases.

Please amend the paragraph starting at page 3, line 13 and ending at line 22 as follows.

Accordingly, for the degree of crushing in the primary crushing process of process cartridges, it is important that parts constituted by multiple kinds of materials, such as metal materials and rubber materials, for example, a charging roller and a cleaning blade be subjected to crushing treatment in the primary crushing process to such an extent that the above-described parts, i.e., rubber materials, can be separated from the containers of the process cartridges without destroying their shapes.

Please amend the paragraph starting at page 3, line 23 and ending at line 27 as follows.

However, in some unit parts, such as a photosensitive drum, which are constituted by aluminum and resin materials, it is impossible to separate the aluminum and resin materials from each other with the crushing strength of the primary crushing process.

Please amend the paragraph starting at page 4, line 7 and ending at line 10 as follows.

The task of the present invention is to recover metal materials which are recycled from a used process cartridge with high ~~purities~~ purity, ~~thereby~~ to thereby reduce the cost of recycling.

Please amend the paragraph starting at page 4, line 11 and ending at line 25 as follows.

To accomplish the above-described task, in the present invention, there is provided a method of recycling a process cartridge containing a toner, wherein in a crushing process of a process cartridge containing a recovered toner, [[a]] the major component parts of the container ~~shape~~ of the process cartridge [[is]] are subjected to a disassembly treatment ~~to an extent of main component parts~~, the toner is recovered by suction in a step of disassembly treatment, metal materials, such as ferrous materials and aluminum materials, in component materials of the process cartridge, are subjected to separation treatment after the step of disassembly treatment, and each of the materials is subjected to melting treatment ~~thereby~~ to thereby change the materials to forms capable of reuse as ferrous materials and aluminum materials.

Please amend the paragraph starting at page 4, line 26 and ending at page 5, line 13 as follows.

Another aspect of the invention is to provide a method of recycling metal materials constituting a process cartridge containing a toner, wherein photosensitive drum parts, charging roller parts, cleaning blade parts and development sleeve parts ~~which~~ that constitute the process cartridge and container parts made of a resin material containing each of the materials as well, are disassembled [[to]] into a state separated from the container parts while performing the recovery of the toner by suction in a crushing process, metal materials are

thereafter extracted from the parts by separating dissimilar materials by use of magnetic separation means, eddy current separation means and gravity separation means, and the extracted materials are recycled.

Please amend the paragraph starting at page 5, line 14 and ending at line 28 as follows.

A further aspect of the invention is to provide a method of recycling metal materials constituting a process cartridge containing a toner, wherein in a crushing process the process cartridge is crushed to such an extent that [[a]] the structural form of the process cartridge is disassembled, and the toner is recovered by suction, and in a step of separating a container portion made of a resin material, a charging roller, a cleaning blade, a development sleeve and a photosensitive drum, which constitute the process cartridge for each component material, separation treatment is performed for each component material and metal materials separated ~~from~~ in the step of separation are reused.

Please amend the paragraph starting at page 6, line 18 and ending at line 20 as follows.

FIG. 1 is [[an]] a schematic explanatory drawing of the steps of recycling a process cartridge to which the present invention is applied;

Please amend the paragraph starting at page 6, line 21 and ending at line 22 as follows.

FIG. 2 is [[an]] a schematic explanatory drawing of the makeup of a process cartridge;

Please amend the paragraph starting at page 6, line 23 and ending at line 24 as follows.

FIG. 3 is [[an]] a schematic explanatory drawing of a crushing device;

Please amend the paragraph starting at page 7, line 17 and ending at line 23 as follows.

Referring to the explanatory drawing of the steps of FIG. 1, in a primary crushing step, a process cartridge constituted by multiple materials is subjected to crushing treatment to [[an]] the extent ~~capable of separation~~ that the materials are separated from a container of the process cartridge in the shapes of parts, i.e., in a state in which rubber materials are not crushed.

Please amend the paragraph starting at page 8, line 1 and ending at line 13 as follows.

In the primary crushing step, the container of the process cartridge is subjected to crushing treatment to the level of component parts, and a toner in the container is recovered by

suction during this crushing ~~treatment, and after~~ treatment. After this crushing step, by use of primary metal separation means, such as magnet separation means and eddy current separation means, parts constituted by a plurality of component materials, such as ferrous materials, metal materials, such as aluminum, rubber materials and ~~resign~~ resin materials, are subjected to separation treatment in a state of parts in which rubber materials, resin materials and metal materials [[are]] coexist.

Please amend the paragraph starting at page 8, line 14 and ending at page 9, line 2 as follows.

Furthermore, the above-described parts subjected to the separation treatment in which rubber materials, resin materials and ~~resin~~ metal materials coexist, are subjected to a secondary separation treatment by use of secondary separation means, whereby rubber materials, resin materials, etc. are separated from ferrous materials and aluminum materials. Furthermore, in a secondary metal separation step, which uses secondary metal separation means, such as magnetic separation means and eddy current separation means, high-purity ferrous materials and aluminum materials are obtained. The ferrous materials and aluminum materials are each subjected to melting treatment ~~thereby~~ to thereby change the materials into forms capable of reuse as ferrous materials and aluminum materials.

Please amend the paragraph starting at page 9, line 11 and ending at line 17 as follows.

The container portion 2 comprises a toner housing portion 1a to house a toner, which is a transfer residue, from the photosensitive drum in the process cartridge. The photosensitive drum 4 is fabricated by applying a photosensitive layer to an aluminum drum surface, and a driving gear made of a resin material etc., is [[are]] attached to an end of the photosensitive drum.

Please amend the paragraph starting at page 9, line 22 and ending at line 24 as follows.

In the development sleeve ~~part~~ 10, a magnet made of a resin material is provided within a sleeve made of aluminum.

Please amend the paragraph starting at page 10, line 17 and ending at line 18 as follows.

The numerals 22a, [[30a]] and 22b denote an opening and closing door of the crushing device 22, and the toner separation chamber 30, respectively.

Please amend the paragraph starting at page 10, line 19 and ending at line 24 as follows.

The numerals 40, 40A, 40B denote [[an]] inert gas supply ~~device~~ devices, and ~~each of the supply devices supplies~~ more specifically devices 40 and 40A supply an inert gas such as nitrogen gas to the above-described crushing device 22 via supply pipes and the devices 40 and 40B supply inert gas such as nitrogen to the toner separation chamber 30 via supply pipes.

Please amend the paragraph starting at page 10, line 24 and ending at page 11, line 2 as follows.

The numerals 42, 44 denote means for recovering [[a]] toner floating within the crusher container 22 and the toner separation chamber 30, respectively. The recovery means suck and recover the toner along with the nitrogen gas in the crusher container and separation chamber by use of suction means 42A, 44A.

Please amend the paragraph starting at page 11, line 3 and ending at line 11 as follows.

The numerals 46, 48 denote [[a]] concentration measuring ~~sensor~~ sensors which ~~measures~~ measure the oxygen concentration within the above-described crusher container 22 and toner separation chamber 30, respectively. The supply volume of nitrogen gas is adjusted by introducing measurement signals of the sensors into control means (not shown) and the oxygen concentration in the container is adjusted thereby to prevent an induction of a dust explosion.

Please amend the paragraph starting at page 11, line 12 and ending at line 16 as follows.

[[A]] To use the crushing device, a plurality of process cartridges ~~recovered~~ are placed into a crusher container of the above-described makeup, the oxygen concentration within the container is adjusted to not more than 10% by supplying nitrogen gas thereto, and the rotary blade for crushing is driven.

Please amend the paragraph starting at page 11, line 17 and ending at line 21 as follows.

Within the container, the process cartridges are raised and thrown against the inner wall of the container by the rotary blade, with the result that the container portion made of a resin material is crushed by [[an]] the impact force.

Please amend the paragraph starting at page 12, line 5 and ending at line 10 as follows.

The extent of crushing of a process cartridge in the above-described crusher container 22 is such that the process carriage is disassembled [[to]] into each of the parts which constitute the process cartridge and, at the same time, the component materials of each part are deformed.

Please amend the paragraph starting at page 12, line 16 and ending at line 27 as follows.

As shown in FIG. 5, the crushing treatment in the crushing process is such that for the component materials of each part, each of the part materials is not finely crushed. That is, the shape of each part containing each metal material is in a deformation state which maintains the original shape and in a crushed state in which the disassembly of the parts is mainly ~~aimed at~~ achieved, and the crushed ~~things of~~ parts which are constituted by metal and rubber maintain the shapes of the parts, i.e., maintain a state in which rubber is not crushed, under such crushing conditions that permit separation from the process cartridge container.

Please amend the paragraph starting at page 13, line 1 and ending at line 4 as follows.

The crushed ~~things which~~ elements that have been treated by the above-described primary crushing device as described above are caused to fall into the toner separation chamber 30.

Please amend the paragraph starting at page 13, line 5 and ending at line 6 as follows.

The crushed ~~things~~ elements in the toner separation chamber are subjected to an impact action by the impact means.

Please amend the paragraph starting at page 13, line 7 and ending at line 10 as follows.

Even by use of the above-described recovery means, it is difficult to completely recover the toner which has been scattered in the above-described crushing device because it adheres to the crushed things.

Please amend the paragraph starting at page 13, line 11 and ending at line 14 as follows.

For this reason, by applying an impact action to the crushed ~~things~~ elements in the toner separation chamber, the unrecovered toner is separated from the crushed ~~things~~ elements and sucked and recovered by the recovery means.

Please amend the paragraph starting at page 13, line 15 and ending at line 21 as follows.

After the separation of the toner by the above-described toner separation chamber 30, the crushed ~~things~~ elements are subjected to the separation of parts containing ferrous materials from the crushed ~~things~~ elements by use of the magnetic separation means and eddy current separation means and the separation of parts containing aluminum.

Please amend the paragraph starting at page 14, line 1 and ending at line 5 as follows.

FIG. 6 shows the crushed state of portions of each part which are constituted by metal when the crushed ~~things~~ elements, for which the separation work of materials other than the above-described metal materials has been finished, have been transferred to the secondary crushing step.

Please amend the paragraph starting at page 14, line 9 and ending at line 12 as follows.

In this secondary crushing step, the crushing conditions, such as the crushing time, are set so that the separation of metals, rubber, etc., can be completely performed.

Please amend the paragraph starting at page 14, line 24 and ending at page 15, line 5 as follows.

If the crushing treatment time in the secondary crushing step is long, the fracture due to the further crushing of crushed pieces of each part proceeds, each part assumes a form quite different from its original form, metal materials undergo plastic deformation and other composite members other than metals are separated from the metals. The deformation of metal materials is absolutely plastic deformation and fracture, such as cutting, should not occur.

Please amend the paragraph starting at page 15, line 22 and ending at line 25 as follows.

Incidentally, when the forms of the parts were as shown in FIG. 6, the recovery rate ferrous materials was not less than 90% [[in]] and also for aluminum materials the recovery rate was not less than 90%.